## **SOAR Project Status**

## **Themes**

- 1. The 'New State' of the Pacific Arctic sector: Observations & models of sea ice loss, effects on primary production and acoustic ecology
- 2. Response of mid-level trophic species to the 'New State' of the Pacific Arctic: Benthic and pelagic invertebrates + forage fishes (cod, capelin, sand lance etc.)
- 3. Response of upper-trophic species to the 'New State' of the Pacific Arctic: Marine mammal and seabird distribution, relative abundance and phenology

## **Projects & Papers**

Theme 1. The 'New State' of the Pacific Arctic sector: Observations & models of sea						
ice loss, effects on primary production and acoustic ecology						

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Project Lead		Updates	Paper Title			
** Moore		<ul> <li>Figures complete, needs text</li> <li>Draft manuscript expected in mid- February</li> </ul>	Variability in annual persistence, breakup, and formation of sea ice cover in the Pacific Arctic region			
Arrigo ** Stabeno	9/2/13	Draft manuscript received and reviewed	Primary production in the Pacific sector of the Arctic Ocean			
Mathis ** Stabeno	11/14/13	Draft manuscript received and out for review	An ocean acidification vulnerability index for the Pacific Arctic region			
Wood & Overland ** Stabeno		<ul><li>Draft out to coauthors</li><li>Draft expected in early February</li></ul>	A decade of environmental change in the Pacific Arctic region			
Pickart & **Grebmeier		<ul> <li>Awaits further contribution from coauthors, some figures complete</li> <li>Draft expected mid-February</li> </ul>	Mechanisms for enhanced trophic productivity in Barrow Canyon, Chukchi Sea			

Theme 2. Response of mid-level trophic species to the 'New State' of the Pacific Arctic: Benthic and pelagic invertebrates + forage fishes (cod, capelin, sand lance etc.)

<b>Project Lead</b>	Updates	Paper Title
Grebmeier** & Bluhm	<ul> <li>Meetings held January &amp; March 2013</li> <li>Outline and draft figures complete</li> <li>Draft manuscript expected in mid- March</li> </ul>	Benthic system analysis at predator-prey "hotspot" sites along a latitudinal gradient in the northern Bering and Chukchi seas

Logerwell & Napp ** Moore  Divoky ** Suydam		<ul> <li>Workshop in Seattle, May 2013</li> <li>All data received, beginning analysis</li> <li>Draft to coauthors in Feb, to journal in mid-March</li> <li>Meeting in January &amp; November 2013</li> <li>Figures complete, writing underway</li> <li>Draft expected in mid-February</li> </ul>	Fish of the Beaufort and Chukchi Seas  Consequences of summer sea ice loss to seabirds and seals in the Chukchi and Beaufort seas
		e of upper-trophic species to the 'N	
	an	d seabird distribution, relative ab	
Project Lead		Updates	Paper Title
Clark**		<ul> <li>Workshop November 2012, Ithaca</li> <li>Figures complete         Draft to coauthors early February, submitted by mid-February     </li> </ul>	A year in the acoustic world of western Arctic bowhead whales.
George**	12/6/13	Draft manuscript received and in review	Western Arctic bowhead whale body condition and links to summer sea ice and upwelling in the Beaufort Sea
Kuletz & Ferguson ** Angliss		<ul> <li>Meetings October 2012, Seattle; January &amp; March 2013, ANC</li> <li>Analysis complete, writing underway</li> <li>Draft manuscript expected in mid- February</li> </ul>	Seasonal and spatial patterns in marine bird and mammal abundance and distribution in the Pacific Arctic: A comparison of biologically important pelagic areas
Citta & Quakenbush **George	12/30/13	Draft manuscript received and in review	Oceanographic and other factors associated with western Arctic bowhead whale "hotspots"
Suydam**		<ul> <li>Meeting in January 2013 &amp; 2014</li> <li>Figures complete, but not written yet</li> </ul>	Relationship between beluga whales, Arctic cod, and oceanographic conditions in Barrow Canyon and at the shelf break of the western Beaufort Sea
Harwood **George	1/31/14	<ul><li>C. George &amp; G. Divoky joined paper</li><li>Draft manuscript received</li></ul>	Scale Matters: Upper trophic level species and what they can tell us about ecosystem shifts in the Beaufort Sea
Project Lead		Updates	Paper Title
Moore & Stabeno		A synthesis of the key findings of all papers in the Progress in Oceanography special issue	Synthesis of the synthesis